



Computing Long Term Planning

Year 1/2

Cycle A	National Curriculum	Teaching	Resources (add as teaching progresses)
Autumn 1	<p style="text-align: center;"><u>Online Safety</u></p> <ul style="list-style-type: none"> • <i>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour</i> • <i>identify a range of ways to report concerns about content and contact.</i> 		<p style="text-align: center;">*Hectors world - http://www.thinkuknow.co.uk/</p>
Autumn 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> • <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i> 	<p style="text-align: center;">Switching a computer on/off, Logging on/off, Saving work, Printing, Copy and pasting images/saving images. Resizing images.</p>	<p style="text-align: center;">Laptops, Ipads, Word, PowerPoint, Publisher.</p>
Spring 1	<p style="text-align: center;"><u>Computer Science</u></p> <ul style="list-style-type: none"> • <i>understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</i> • <i>create and debug simple programs</i> • <i>use logical reasoning to predict the behaviour of simple programs</i> 	<p style="text-align: center;">Bee bots - writing algorithms on flashcards then programming the beebots. Debug (fix) algorithms where necessary to achieve desired goal.</p>	<p style="text-align: center;">*Kodable.</p>

Spring 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i> 	<p>Typing skills, correcting spellings automatically.</p> <p>Switching on, closing Apps, saving images, downloading and deleting Apps.</p>	<p>Powerpoint, Word, Publisher</p> <p>Computers/laptops.</p> <p>Ipads,</p>
Summer 1	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i> 	<p>Researching for information independently,</p> <p>Using key words for refined results '<u>Lion facts for kids</u>' will bring back more appropriate content.</p> <p>Opening multiple web pages for more searches.</p> <p>Coping and pasting text</p> <p>Emoticons which are used to convey meaning. ☺ ☹ :(:x :/</p>	<p>Yahoo for kids, kids click,</p> <p>*internet</p> <p>Laptops/Ipads</p>
Summer 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i> 	<p>Researching information independently</p> <p>Filtering results for specific images and content.</p>	

Year 1/2

Cycle B	National Curriculum	Teaching	Resources (add as teaching progresses)
Autumn 1	<p style="text-align: center;"><u>Online Safety</u></p> <ul style="list-style-type: none">• <i>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour</i>• <i>identify a range of ways to report concerns about content and contact.</i>		<p style="text-align: center;">*Hectors world - http://www.thinkuknow.co.uk/</p>
Autumn 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none">• <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i>	<p style="text-align: center;">Word processing and presentation software</p> <p style="text-align: center;">Using an iPad/iPod/device</p> <p style="text-align: center;">Recording sounds, create a video, take a screen shot.</p>	<p style="text-align: center;">Powerpoint, Word, Publisher</p> <p style="text-align: center;">Ipad.</p>
Spring 1	<p style="text-align: center;"><u>Computer Science</u></p> <ul style="list-style-type: none">• <i>understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</i>• <i>create and debug simple programs</i>• <i>use logical reasoning to predict the behaviour of simple programs</i>	<p style="text-align: center;">Bee bots - writing algorithms on flashcards then programming the beebots.</p> <p style="text-align: center;">Debug (fix) algorithms where necessary to achieve desired goal.</p> <p style="text-align: center;">Talk through algorithms with children, predicting what will happen.</p>	<p style="text-align: center;">*Beebots,</p> <p style="text-align: center;">Flashcards (premade algorithms),</p> <p style="text-align: center;">Flashcards (to write algorithms),</p>

Spring 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>Recognise common uses of information technology beyond the classroom.</i> 	Using the school website.	Leave a comment on the school website.
Summer 1	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i> 	<p>Researching for information independently,</p> <p>Creating documents using the internet and publishing software (Word, Publisher, Powerpoint).</p> <p>Formatting the document appropriately to present information.</p>	Laptops/Ipads
Summer 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i> 		



Computing Long Term Planning

Year 3/4

Cycle A	National Curriculum	Teaching	Resources (add as teaching progresses)
Autumn 1	<p>1. <u>Online Safety and Core Skills</u></p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p>2. <u>Individual programming lessons (having a go at new resources for their year group/age appropriate)</u></p> <ul style="list-style-type: none"> • <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> • <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> • <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 	<p>1. Internet safety display, CEOP video resources,</p> <p>Create a 'how to be safe online' presentation using Videolicious App.</p> <p>Being safe using mobile phones and multimedia devices.</p> <p>2. Predicting what will happen - talking through an algorithm.</p> <p>Flashcards for algorithms 'getting up and going to school' algorithm.</p> <p>Algorithms created for favourite pop songs,</p> <p>'Jam sandwich' - clear, concise and precise instruction 'algorithms - children given language to choose from.</p>	<p>CEOP website.</p> <p>*Smart rules.</p> <p>http://www.saferinternet.org.uk/</p> <p>http://www.chatdanger.com/</p> <p>*Beebots</p>

Autumn 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u> <u>(70% of computing curriculum)</u></p> <ul style="list-style-type: none"> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 	<p style="text-align: center;">‘using ICT and exploring it’.</p> <p>*Provide opportunities to explore (the internet).</p>	
Spring 1	<p style="text-align: center;"><u>Computer Science</u> <u>(25% of Computing Curriculum)</u></p> <ul style="list-style-type: none"> <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 	<p style="text-align: center;">Algorithms,</p> <p>Predicting what will happen – talking through an algorithm.</p> <p style="text-align: center;">Flashcards for algorithms,</p> <p>Algorithms created for favourite pop songs,</p> <p style="text-align: center;">‘Jam sandwich’ - clear, concise and precise, instruction ‘algorithms – children given language to choose from</p> <hr/> <p style="text-align: center;">Debugging (fixing) problems.</p>	<p style="text-align: center;">*lightbot</p> <p style="text-align: center;">*purple mash</p> <p style="text-align: center;">*Hour of code</p> <p style="text-align: center;">*Code academy</p>

Spring 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 	<p>*Provide opportunities to explore (the internet).</p> <p>How to search for information, How the searched information is sorted, How to find a specific picture, What the numbers mean on a picture (picture resolution/size).</p> <p>Texts boxes, Clip art, Formatting, Changing text types; fonts and sizes.</p>	<p>*word, *powerpoint, *Publisher. *Using key words to find a given/obscure picture.</p>
Summer 1	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 	<p>Exploring the internet, refining searches.</p> <p>Coding programmes with increasing complexity (including 'if, when' statements).</p>	<p>*Purple mash coding. *Internet</p>
Summer 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 	<p>Exploring the internet, refining searches.</p> <p>Coding programmes with increasing complexity (including 'if, when' statements).</p>	<p>*Purple mash coding.</p>

Year 3/4

Cycle B	National Curriculum	Teaching	Resources (add as teaching progresses)
Autumn 1	<p>1. <u>Online Safety and Core Skills</u></p> <ul style="list-style-type: none">use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p>2. <u>Individual programming lessons (having a go at new resources for their year group/age appropriate)</u></p> <ul style="list-style-type: none"><i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i><i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i><i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i>	<p>Fake accounts, false information.</p> <p>We want children to spot unacceptable behaviour; this cannot be done without exposing them to unacceptable behaviour. They need to develop a moral compass in real life as well as online life and identities.</p> <p>More advanced coding applications - link with flashcards, writing out the code explicitly.</p>	<p>Tell children to find out about the tree octopus - set up and designed as a fake website story. Teach the children to use common sense rather than rely on what the internet tells us. http://zapatopi.net/treeoctopus/</p> <p>*Smart rules</p> <p>*lightbot</p> <p>*purple mash</p> <p>*Hour of code</p> <p>*Code academy</p>

Autumn 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u> <u>(70% of Computing Curriculum)</u></p> <ul style="list-style-type: none"> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 	<p>Research information on a theme (Carl Linnaeus in Science/topic links)</p> <p>Search for appropriate pictures – save, edit, format them.</p> <p>Word process a script of what you will say in the video</p> <p>Create professional videos to explain and inform on a topic.</p>	<p>*Ipads</p> <p>*Videolicious</p>
Spring 1	<p style="text-align: center;"><u>Computer Science</u> <u>(25% of Computing Curriculum)</u></p> <ul style="list-style-type: none"> <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 	<p>Create flowcharts for favourite pop songs (algorithms),</p> <p>Talk through each step, predicting the behaviour of code – what effect it will have.</p> <p>Algorithms for simple tasks,</p> <p>Programme another human to do ‘the time warp, make a sandwich’ write algorithms on flashcards, debug and manipulate where necessary.</p>	<p>*lightbot</p> <p>*purple mash</p> <p>*Hour of code</p> <p>*Code academy</p> <p>*Hikatzu app.</p> <p>*Beebot app.</p> <p>More able – introduced to scratch (secured in upper key stage 2).</p>

Spring 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</i> <i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> 	<p>Searching for specific images/content,</p> <p>Search races, searching for an image in class on internet - who and how will it be found? Refine search criteria etc...</p>	<p>Show children a very specific image on screen, children 'race' each other online to find it using vocabulary in search engines.</p> <p>Search for the same images on different search engines, how/why do they not appear in the same places?</p> <p>http://www.code-it.co.uk/netintsearch.html</p> <p>*purple mash coding.</p>
Summer 1	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 	<p>Research information on a theme (Carl Linnaeus in Science/topic links), focused searches.</p> <p>Search for appropriate pictures - save, edit, format them.</p> <p>Word process a script of what you will say in the video.</p> <p>Use word processed script to create professional videos to explain and inform on a topic (imovie/Videolicious).</p>	<p>*Ipads/Laptops</p> <p>*Ipads</p> <p>*Videolicious</p>

Summer 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none">• <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i>	<p style="text-align: center;">Make simple sprites/characters,</p> <p style="text-align: center;">Complete simple commands for the character to follow,</p>	<p style="text-align: center;">*Purple mash coding</p> <ul style="list-style-type: none">- Moving onto scratch coding (preparing for upper key stage 2).
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Computing Long Term Planning

Year 5/6

Cycle A	National Curriculum	Teaching	Resources (add as teaching progresses)
Autumn 1	<p style="text-align: center;"><u>Online Safety</u></p> <ul style="list-style-type: none"> <i>use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i> 		<p>http://www.childnet.com/resources/young-people-and-social-networking-sites</p> <p>http://www.digizen.org/</p>
Autumn 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p>	<p>Searching information, using and refining searches</p> <p>Importing sounds, images and media *into Keytone App.</p> <p>Creating professional presentations on Keynote</p>	<p>*Keynote app/Ipads</p>
Spring 1	<p style="text-align: center;"><u>Computer Science</u></p> <ul style="list-style-type: none"> <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> <i>use logical reasoning to explain how some simple algorithms work and to</i> 	<p>Scratch</p> <p>Complete 'if/when' statements online.</p> <p>Debug (fix) programmes/algorithms, Programmes of increasing complexity.</p> <p>Starting to write out code using technical coding language.</p>	<p>**purple mash - starting to introduce Scratch.</p> <p>*Hikatzu app.</p> <p>A.L.E.X app.</p> <p>*Faulty algorithms which need fixing (on computers and not on computers - flashcards?)</p>

	<i>detect and correct errors in algorithms and programs</i>		
Spring 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</i> <i>• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i> 	<p>Searching for specific images/content.</p> <p>Search races, searching for an image in class on internet - who and how will it be found? Refine search criteria etc...</p>	<p>Show children a very specific image on screen, children 'race' each other online to find it using vocabulary in search engines.</p> <p>Search for the same images on different search engines, how/why do they not appear in the same places?</p> <p>*purple mash coding.</p>
Summer 1	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 		
Summer 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of</i> 		

	<i>programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i>		
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Cycle B	National Curriculum	Teaching	Resources (add as teaching progresses)
Autumn 1	<p align="center"><u>Online Safety</u></p> <ul style="list-style-type: none"> use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<p>Year 6 E-safety.</p> <p>Social media?</p> <p>Evaluate effectiveness of school website for e-safety.</p>	<p>*Take a picture of your teacher, see how far you can send it in the space of your lesson by emailing, sharing it etc...</p> <p>http://www.childnet.com/resources/young-people-and-social-networking-sites</p> <p>http://www.digizen.org/</p>
Autumn 2	<p align="center"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</i> 	<p>Evaluate effectiveness of school website for target audience,</p> <p>Children write questionnaire for Mrs Whitaker to give to parents.</p> <p>Show children an image, create keywords #hashtags, write a sentence about the picture and group the hashtags together. Are all of the sentences on a similar theme?</p>	<p>*internet/school website</p>

Spring 1	<p style="text-align: center;"><u>Computer Science</u></p> <ul style="list-style-type: none"> • <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i> • <i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i> • <i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i> 	Focus on writing elaborate algorithms, debugging (fixing) as you go. Hikatzu runs both coding buttons and javascript – focus more towards writing the javascript.	<p>*Scratch.</p> <p>*introduce Hikatzu app and programming language/javascript.</p> <p>A.L.E.X app.</p> <p>Faulty algorithms which need fixing (on computers and not on computers – flashcards?)</p> <p>Scratch planning: http://www.code-it.co.uk/csplanning.html</p>
Spring 2	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> • <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i> 		*scratch: http://www.code-it.co.uk/csplanning.html
Summer 1	<p style="text-align: center;"><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none"> • <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing,</i> 	Writing out code using technical coding language.	*Scratch: http://www.code-it.co.uk/csplanning.html

	<i>evaluating and presenting data and information</i>		
Summer 2	<p><u>Digital Literacy and ICT</u></p> <ul style="list-style-type: none">• <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i>	Writing out code using technical coding language.	*Scratch: http://www.code-it.co.uk/csplanning.html